00862.023559.   PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:)
                                   :   Examiner: J. Roberts
HIROSHI TOJO   )
                                   :   Group Art Unit: 2621
Application No.: 10/829,437   )
                                   :   Technology Center: 2600
Filed: April 22, 2004   )
                                   :
For: MOVING IMAGE PROCESSING   )
        METHOD AND APPARATUS   :   July 28, 2010

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANT'S BRIEF ON APPEAL

Sir:

        This Brief is submitted in support of Appellant's appeal from the final

rejection of Claims 12 to 23 in the above-identified application. A timely Notice of Appeal

was filed with a Petition for Extension of Time on January 14, 2010, along with a Pre-

Appeal Brief Request for Review. This Appeal Brief is being filed in accordance with the

instruction to proceed to appeal in the Notice of Panel Decision From Pre-Appeal Brief

Review. In compliance with 37 CFR § 41.20, submitted herewith is a check in payment of

the $540.00 brief fee.

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TABLE OF AUTHORITIES

(1)   <u>REAL PARTY IN INTEREST</u>

The real party in interest herein is the assignee of record in the present application, Canon Kabushiki Kaisha.

(2)   RELATED APPEALS AND INTERFERENCES

Appellant, Appellant's legal representative, and the Assignee are not aware of any other related appeals or interferences which will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.

(3)   <u>STATUS OF CLAIMS</u>

<u>Cancelled</u>: Claims 1 to 11

<u>Pending</u>: Claims 12 to 23, of which only Claims 12 and 21 are independent

<u>Rejected</u>: Claims 12 to 23, under 35 U.S.C. § 103(a), as follows:

Independent Claims 12 and 21:   over Japan 8-163488 (Matsushita '488), "Applicant Admitted Prior Art" (AAPA) and Official Notice

Dependent Claims 13 to 17, 19, 20, 22 and 23:   over Matsushita '488, AAPA and Official Notice

Dependent Claim 18:   over Matsushita '488, AAPA, Japan 5-147337 (published as JP 7-023322, hereafter "Matsushita '322") and Official Notice

<u>Rejections Appealed</u>: Claims 12 to 23

(4)   <u>STATUS OF AMENDMENTS</u>

        The claims have not been amended subsequent to the final rejection. The

language of the claims is therefore identical to that set forth in the Response To Final

Office Action dated December 14, 2009. In addition, a copy of the claims involved in the

appeal is provided in the attached Claims Appendix.

(5)   <u>SUMMARY OF CLAIMED SUBJECT MATTER</u>

In accordance with MPEP § 1205.02, elements recited in the claims are identified below with corresponding exemplary elements described in the specification. However, it should be understood that the claimed elements are not limited to the embodiment discussed below, or to the embodiments described in the specification.

Independent Claims 12 and 21 generally concern dividing a moving image on the basis of a plurality of items of additional data which indicate states upon sensing the moving image. An item group formed of one or a plurality of items of additional data is defined, and division information corresponding to the item group is generated on the basis of the additional data of items which belong to the item group.

According to one aspect of Claims 12 and 21, in a case that a plurality of division information is generated in correspondence with a plurality of item groups, the plurality of division information is hierarchized. In one example shown in Appellant's Figure 29, which is reproduced below, the plurality of divisions of the moving image are hierarchized into three layers: 1) image sensing environment, 2) subject, and 3) subject size.

F I G. 29

Level 1 (IMAGE SENSING ENVIRONMENT)					
FLUORESCENT LAMP			SUNLIGHT		
A-1			A-2		2901

Level 2 (SUBJECT)					
SUBJECT A	SUBJECT B	SUBJECT A	SUBJECT B	SUBJECT C	
A-1-1	A-1-2	A-1-3	A-2-1	A-2-2	A-2-3	2902

Level 3 (SUBJECT SIZE) — 2903

	CLOSE-UP		CLOSE-UP	CLOSE-UP		CLOSE-UP	CLOSE-UP	
A-1-2-1	A-1-2-2	A-1-3-1	A-1-3-2	A-2-1-1	A-2-1-2	A-2-2-1	A-2-2-2	A-2-3-1	A-2-3-2
	FULL-LENGTH FULL-LENGTH		FULL-LENGTH	FULL-LENGTH			FULL-LENGTH	
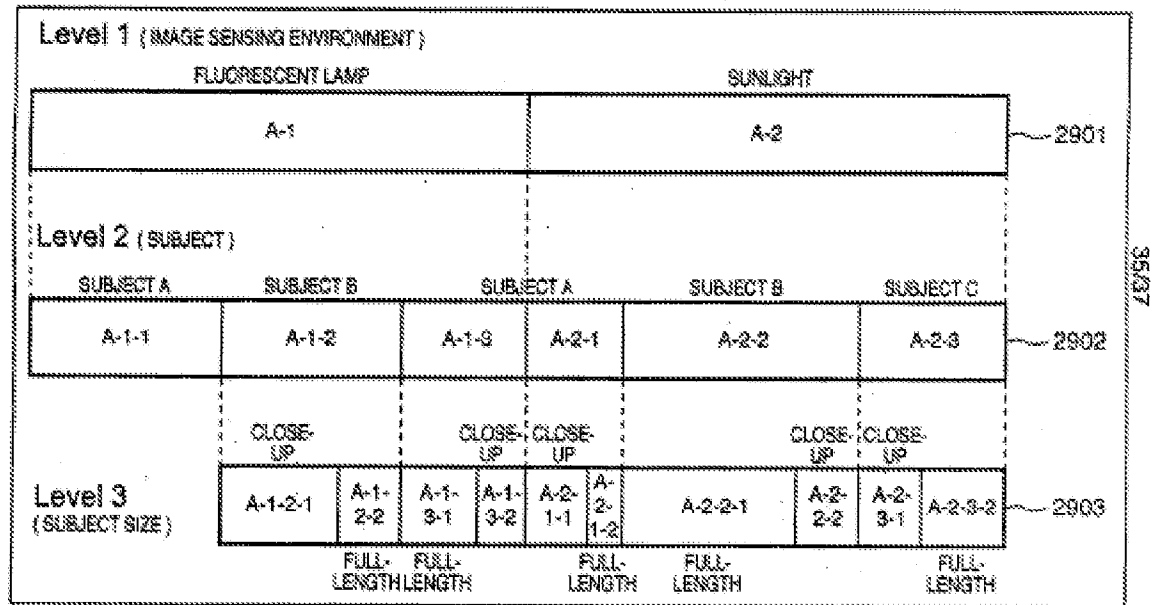
As shown here, there are three hierarchical levels - a first hierarchical level with divisions based on the image sensing environment (fluorescent lamp vs. sunlight), a second hierarchical level with divisions based on the subject (subject A, B or C), and a third hierarchical level with divisions based on subject size (close-up vs. full-length). The image sensing environment is the highest level 1, whereas the subject size is the lowest level 3.

According to another aspect of Claims 12 and 21, division positions are added to division information of a lower layer, based on division information of an upper layer. Thus, in the non-limiting example shown in Appellant's Figure 29, division positions are added to the lower "subject size" layer, based on the division information of the upper "image sensing environment" layer. For example, as shown in Figure 29, the image sensing environment division between fluorescent lamp and sunlight is added to the

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subject size level, creating a specific interval with fluorescent lamp lighting, subject A, and a close-up shot.

One purpose of this arrangement is to provide to provide a more efficient browsing process. In particular, it is ordinarily possible for the user to progressively narrow down browsing to intervals of the moving image which include all desired characteristics from each layer of the image sensing environment. Thus, for example, a user can efficiently browse for an interval which is 1) taken with fluorescent lamp lighting, 2) focuses on subject B, and 3) is taken at a close-up distance.

Independent Claim 12

As claimed, independent Claim 12 is directed to a moving image processing method for dividing a moving image sensed between a beginning of recording and an ending of recording, on the basis of a plurality of items of additional data which indicate states upon sensing the moving image. The additional data is added to the moving image and is able to be read out for each item from the moving image. See Figures 5, 10 and 15, Specification, page 18, line 15 to page 25, line 5, page 32, lines 1 to 7 and page 53, line 12 to page 54, line 13.

The method includes a generation step (e.g., step 2202) of defining an item group formed of one or a plurality of items selected from the plurality of items, and generating division information corresponding to the item group on the basis of the additional data of the items which belong to the item group. See Figures 22, 23 and 26 and Specification, page 64, line 13 to page 65, line 17, page 69, line 24 to page 70, line 3 and page 71, line 23 to page 84, line 25.

The method also includes a hierarchization step (e.g., step 2203) of hierarchizing a plurality of division information generated for each item group, and of adding division positions based on division information of an upper layer to division positions of division information of a lower layer. The plurality of division information is hierarchized and the division positions are added in a case that the plurality of division information is generated in the generation step in correspondence with a plurality of item groups. See Figures 22, 28 and 29 and Specification, page 70, lines 3 to 5, page 65, line 18 to page 66, line 24 and page 85, line 1 to page 89, line 16.

In addition, the method includes a holding step (e.g., step 2205) of holding the division information obtained in the hierarchization step in correspondence with the moving image data in a memory. See, e.g., Figures 20 and 22 and Specification, page 63, line 27 to page 64, line 5.

Independent Claim 21

As claimed, independent Claim 21 is directed to a moving image processing apparatus (e.g., browse device 1030) for dividing a moving image sensed between a beginning of recording and an ending of recording, on the basis of a plurality of items of additional data which indicate states upon sensing the moving image. The additional data is added to the moving image and is able to be read out for each item from the moving image. See Figures 5, 10 and 15, Specification, page 18, line 15 to page 25, line 5, page 32, lines 1 to 7 and page 53, line 12 to page 54, line 13.

The apparatus includes a generation unit (e.g., sub-shot division unit 2003) constructed to define an item group formed of one or a plurality of items selected from the

plurality of items, and generating division information corresponding to the item group on the basis of the additional data of the items which belong to the item group. See Figures 20, 22, 23 and 26, Specification, page 63, lines 16 to 21, page 64, line 13 to page 65, line 17, page 69, line 24 to page 70, line 3 and page 71, line 23 to page 84, line 25.

Additionally, the apparatus includes a hierarchization unit (e.g,.hierarchization unit 2008) constructed to hierarchize a plurality of division information generated for each item group, and constructed to add division positions based on division information of an upper layer to division positions of division information of a lower layer. The plurality of division information is hierarchized and the division positions are added in a case that the plurality of division information is generated by the generation unit in correspondence with a plurality of item groups. See Figures 20, 28 and 29 and Specification, page 63, lines 21 to 23, page 65, line 18 to page 66, line 24, page 70, lines 3 to 5 and page 85, line 1 to page 89, line 16.

Further, the apparatus includes a holding unit (e.g., storage medium 2001) constructed to hold the division information obtained by said hierarchization unit in correspondence with the moving image data. See Figures 20 and 22 and Specification, page 63, line 27 to page 64, line 5.

By virtue of the foregoing arrangements, it is ordinarily possible for a user to quickly browse and reach a desired interval of video with desired characteristics, such as a particular sensing environment, a particular subject, and a particular subject distance.

Dependent Claim 13

As claimed, dependent Claim 13 is directed to the method according to Claim 12, and further comprises a setting step of setting the hierarchical order of the plurality of pieces of division information on the basis of division counts of division information. See Figures 28A and 30 and Specification, page 85, line 4 to page 89, line 16. By virtue of this arrangement, it is ordinarily possible to allow for easier browsing by a user, since the user can start with a level with few divisions, and then narrow down to specific characteristics based on more divisions.

(6)   <u>GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL</u>

       1.   Whether the rejection of Claims 12 and 21 under 35 U.S.C. § 103(a) over Japan 8-163488 (Matsushita '488), "Applicant Admitted Prior Art" (AAPA) and Official Notice should be reversed.

       2.   Whether the rejection of Claims 13 to 17, 19, 20, 22 and 23 under 35 U.S.C. § 103(a) over Matsushita '488, AAPA and Official Notice should be reversed.

       3.   Whether the rejection of Claim 18 under 35 U.S.C. § 103(a) over Matsushita '488, AAPA, Matsushita '322 and Official Notice should be reversed.

(7)   <u>ARGUMENT</u>

For the procedural purposes of this Appeal only, independent Claims 12 and

21 and the claims dependent therefrom rise and fall together, with the exception of Claim

13, which is argued separately. These claims are being argued together solely for the

procedural purposes of expediting the consideration and processing of this Appeal, and

without conceding the separate consideration of these claims for any other purpose, such as

in litigation.

I. **THE REJECTION OF CLAIMS 12 AND 21 SHOULD BE REVERSED BECAUSE THE OFFICE ACTION IS CONTRADICTORY ON ITS FACE, SUCH THAT THERE IS A CLEAR DEFICIENCY IN THE PRIMA FACIE CASE FOR REJECTION.**

Appellant respectfully submits that the instant Office Action is deficient, in

that it is contradictory on its face.

One clear contradiction is the Office Action's concession in one breath that a

claimed feature is not shown in AAPA, and the assertion in another breath that it is.

More specifically, page 9 of the Office Action concedes that Matsushita '488

and AAPA do not disclose hierarchizing a plurality of division information in the case that

the plurality of division information is generated in correspondence with a plurality of item

groups:

> "Matsushita (modified by AAPA) as [a] whole does not explicitly
> disclose wherein the plurality of division information is
> hierarchized and the division positions are added in a case that the
> plurality of division information is generated in the generation step
> in correspondence with a plurality of item groups." Office Action,
> page 9.

For the feature of hierarchizing a plurality of division information in the case that the plurality of division information is generated in correspondence with a plurality of item groups, the Office asserts that Official Notice can be taken. Appellants have previously contested the application of Official Notice, and pursuant to MPEP § 2144.03, have requested documentary evidence. But in support of documentary evidence for Official Notice, the Office Action points right back to the same inadequate AAPA, which the Office Action itself concedes does not disclose this feature:

> "As to Applicants argument to traverse the Office Action's assertion that disclose of hierarchizing a plurality of division information in the case that a plurality of division information is generated in correspondence with a plurality of item groups is well-known in the art. The Examiner respectfully disagrees...*Since AAPA discloses to divide the image changing points into layers (gain, white balance, zoom and pan), and create a division result, it is clear to the Examiner that AAPA teaches to add the changing point layers to create the division result which reads upon the claimed limitation.*" Office Action, pages 4 and 5 (emphasis added).

Thus, as the documentary evidence necessary for response to Appellant's traversal of Official Notice, the instant Office Action simply points back to the same AAPA which the Office Action itself concedes does not disclose this feature.

This contradiction was pointed out in a Response To Final Office Action dated December 14, 2009:

"Applicant respectfully submits that reliance on the AAPA

contradicts the concession at page 9 of the Office Action, to the

effect that the AAPA does not disclose the feature." See Response

To Final Office Action dated December 14, 2009 at page 10.

However, the Advisory Action makes no reference to this contradiction, and

instead maintains that the final rejection was entered correctly.

Appellant therefore respectfully submits the Office Action is contradictory on

its face, such that there is a clear deficiency in the prima facie case in support of the

rejection.

II. **THE REJECTION OF CLAIMS 12 AND 21 SHOULD BE REVERSED BECAUSE APPELLANT'S FIGURE 17 DOES NOT NECESSARILY DEPICT "ONLY THAT WHICH IS OLD", AND SHOULD THEREFORE NOT BE CONSIDERED AS ADMITTED PRIOR ART.**

The Office Action relies on Appellant's Figure 17 as "Applicant Admitted

Prior Art". In that regard, Appellant has repeatedly stated that Figure 17 is not conceded as

prior art. In particular, Appellant maintains that a view for explaining a conventional

technique does not necessarily mean that the explanation itself is conventional:

"The Office Action maintains that since Figure 17 is defined by

Applicant as a view for explaining a conventional moving image

technique, Figure 17 should be designated as 'Prior Art'. This

objection is traversed, since a view for explaining a conventional

technique does not necessarily mean that the view itself is

conventional. In fact, Figure 17 was created by the Applicant, in

order to explain his own discoveries relative to problems in the

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conventional techniques. Since Figure 17 contains Applicant's
own discoveries, it is not correct to state that it illustrates 'only that
which is old', as stated at page 3 of the Office Action.
Accordingly, and since Figure 17 contains original discoveries
made by Applicant herein, it is not being labeled as 'Prior Art'".
Amendment dated May 6, 2009.

Thus, Figure 17 was created by the Appellant, in order to explain his own

discoveries relative to problems in the conventional techniques. Since Figure 17 contains

Appellant's own discoveries, it is not correct to state that it illustrates "only that which is

old". Since Figure 17 does not necessarily depict only that which is old, Figure 17 is not

conceded as prior art.

> MPEP § 2129 covers the situation of admissions as prior art:

> "A statement by an applicant in the specification or made during
> prosecution identifying the work of another as 'prior art' is an
> admission which can be relied upon for both anticipation and
> obviousness determinations, regardless of whether the admitted
> prior art would otherwise qualify as prior art under the statutory
> categories of 35 U.S.C. 102..."

> "However, even if labeled as 'prior art,' the work of the same
> inventive entity may not be considered prior art against the claims
> unless it falls under one of the statutory categories..."

> "Consequently, the examiner must determine whether the subject
> matter identified as 'prior art' is applicant's own work, or the work
> of another. In the absence of another credible explanation,

examiners should treat such subject matter as the work of another."
MPEP § 2129(I).

Here, the Appellant has repeatedly provided a credible explanation that Figure 17 was created by the Appellant in order to explain his own discoveries relative to problems in conventional techniques. As such, it is error for the Examiner to insist that Figure 17 is "Applicant Admitted Prior Art".

III. THE REJECTION OF CLAIMS 12 AND 21 SHOULD BE REVERSED BECAUSE CLAIMS 12 AND 21 WOULD NOT HAVE BEEN OBVIOUS OVER MATSUSHITA '488, AAPA AND OFFICIAL NOTICE SINCE THE COMBINATION OF THESE REFERENCES FAILS TO DISCLOSE OR SUGGEST KEY FEATURES OF THE CLAIMS.

Notwithstanding the above, even if Figure 17 is accepted as AAPA solely for the purposes of argument, the applied art is still not seen to disclose or suggest key features of Claims 12 and 21.

Specifically, in the rejection of Claims 12 and 21, there are at least two instances where the applied art fails to disclose or suggest claimed features. For purposes of readability, each specific claim limitation at issue will be discussed separately.

A. Applicable Case Law

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) wherein in evidence, so-called secondary considerations. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966).

In KSR, the Supreme Court emphasized that "[r]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (citing In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)). Furthermore, '[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.' *KSR*, 550 U.S. at 421. In particular, a claim directed to a combination of prior art elements 'is not proved obvious merely by demonstrating that each element was, independently, known in the prior art.' *Id.* at 401.

Finally, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382 1385 (CCPA 1970).

Consistent with the case law, MPEP § 2143 provides that in order to establish a prima facie case of obviousness, three basic criteria must be met: there must be motivation to modify the reference or combine reference teachings, there must be a reasonable expectation of success, and the prior art reference (or references when combined) must teach or suggest all of the claim limitations. See MPEP § 2143.

It is the position of the Appellant that the applied art fails to disclose or suggest key limitations of the claims, as discussed more fully below.

B. **Claimed Feature: "hierarchizing a plurality of division information generated for each item group of a plurality of item groups"**

Page 9 of the Office Action concedes that Matsushita '488 and AAPA do not disclose hierarchizing a plurality of division information. Appellant agrees, and submits that it logically follows that Matsushita '488 and AAPA also do not disclose hierarchizing a plurality of division information generated for each item group of a plurality of item groups.

Notwithstanding this concession, the Office Action apparently relies on Appellant's Figure 17 for the feature of hierarchizing a plurality of division information generated for each item group of a plurality of items. As indicated above, Appellant does not concede that Figure 17 is prior art. However, even accepting Figure 17 is accepted as AAPA solely for the purposes of argument, Figure 17 does not disclose or suggest the claimed hierarchization feature.

In particular, as shown in Appellant's Figure 17(a), a plurality of division information are generated according to different camera operations (zoom, gain, etc.). However, as can clearly be seen from Figure 17(b), the plurality of division information are treated equally, i.e., without hierarchization:
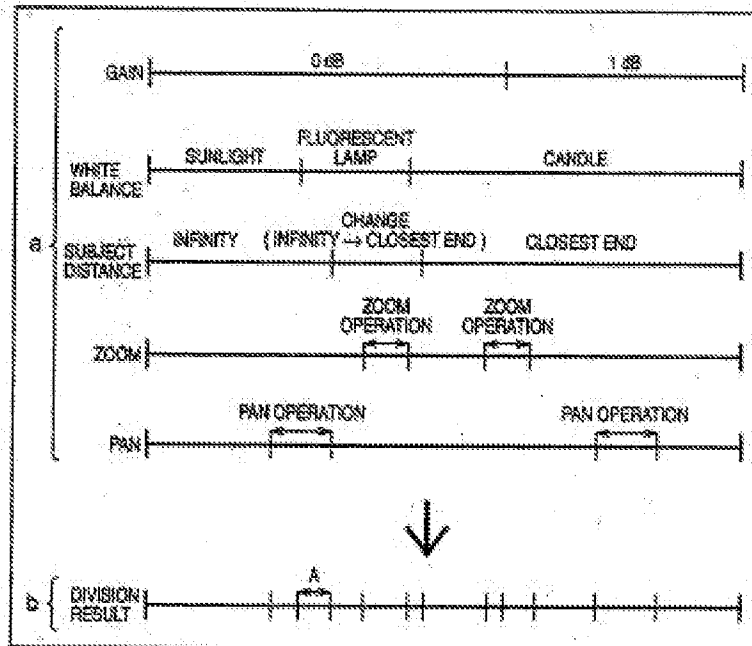
FIG. 17

Figure 17(a) shows a plurality of different types of divisions of a moving

image, based on different camera states/operations such as gain, white balance, and zoom.

The plurality of division information shown in Figure 17(a) are depicted vertically simply

for convenience of showing that each of the different types of generated division

information are treated the same in Figure 17(b). Each of the different types of division

information in Figure 17(a) is completely independent of the other types of division

information, and there is no relationship or hierarchy between the different types of

division information. Thus, each type of division information is linear, and is not

hierarchical.

Figure 17(b) shows the result when each of the different types of division

information in Figure 17(a) is treated the same, i.e., without hierarchization. Specifically,

there is no hierarchization and every division is entered into the division result of Figure

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17(b) on the same level. Each of the different types of divisions in Figure 17(a) is treated equally, resulting in numerous divisions of the moving image which often end up as insignificant intervals. Thus, as shown in Figure 17(b), each of the plurality of different division information is treated linearly, on the same level.

Clearly, in the division result shown in Figure 17(b), each of the plurality of different divisions are treated equally; specifically, each of the different types of division is entered on the same level on the division result shown in Figure 17(b). Put another way, Figure 17(a) simply depicts a number of different types of division information, and Figure 17(b) shows that each of the different types are treated as equals. Thus, at best, Figure 17(b) shows a single level of division information, which contradicts any possibility of a hierarchy between the plurality of division information (e.g., pan, zoom, etc.).

Moreover, those of ordinary skill would understand that Figure 17 does not show hierarchization as claimed, for the reason that Figure 17 is used to explain how the lack of hierarchization leads to disadvantages. Specifically, since there is no hierarchization and every division is entered into the division result on the same level, the resultant moving image ends up being segmented into too many intervals, many of which are insignificant intervals, as shown in Figure 17(b). See Specification, page 2:

> "As shown in (b) of Fig. 17, since division positions based on a
> plurality of different items are present together, the moving image
> is segmented into many intervals. Also, when a given interval is
> determined by a plurality of different items, it does not become a
> significant unit (note that the significant unit means, for example,
> an interval where subject A appears). For example, interval A in
> (b) of Fig. 17 starts from a changing point of White balance, and

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ends at an end point of Pan operation, and does not form a

significant unit." Specification, page 2, lines 9 to 19.

Thus, Appellant's Figure 17 can not possibly show hierarchization of a

plurality of division information, as all of the plurality of division information are on the

same level.

The Office Action also relies on Official Notice for the feature of

hierarchizing a plurality of division information generated for each item group of a

plurality of items. Upon Appellant's traversal, however, the documentary evidence

provided by the Office Action for such Official Notice is simply Appellant's Figure 17,

which, as discussed above, (i) concededly does not disclose such feature, (ii) is not

necessarily prior art, and (iii) can not possibly show hierarchization of a plurality of

division information, as all of the division information are on the same level.

Matsushita '322 has been reviewed and is not seen to remedy the deficiencies

of Matsushita '488 and AAPA. Moreover, the Office Action did not rely on Matsushita

'322 for this feature.

Thus, the applied art fails to disclose or suggest hierarchizing a plurality of

division information generated for each item group of a plurality of item groups.

Therefore, the rejection of Claims 12 and 21 should be reversed.

C. **Claimed Feature: "adding division positions to division information of a lower layer, based on division information of an upper layer"**

Page 9 of the Office Action concedes that Matsushita '488 and AAPA do not disclose adding division positions in the case that a plurality of division information is generated in correspondence with a plurality of item groups:

> "Matsushida (modified by AAPA) as a whole does not explicitly disclose wherein the plurality of division information is hierarchized and the division positions are added in the case that the plurality of division information is generated in the generation step in correspondence with a plurality of an [sic] item groups."
> Office Action, page 9.

Appellant agrees, and submits that it logically follows that Matsushita '488 and AAPA also do not disclose adding division positions to division information of a lower layer, based on division information of an upper layer.

Notwithstanding such concession, the Office Action again apparently relies on Appellant's Figure 17 for the feature of adding division positions to division information of a lower layer, based on division information of an upper layer. As indicated above, Appellant does not concede that Figure 17 is prior art. However, even if Figure 17 is accepted as AAPA solely for the purposes of argument, Figure 17 does not disclose or suggest the claimed addition.

In particular, as discussed above, Figure 17 does not disclose a plurality of hierarchical levels at all. Figure 17 is reproduced again below for convenience:

FIG. 17
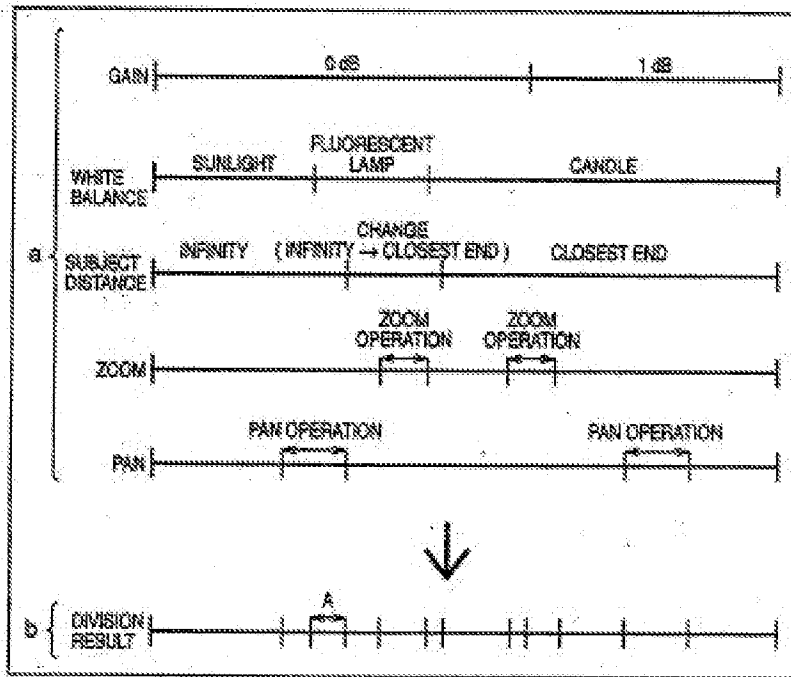
As can clearly be seen from Figure 17(b), there are no hierarchical layers of divisions based on the different camera operations. In particular, as explained above, Figure 17(b) at best shows a single level of division information, which contradicts any possibility of a hierarchy between the plurality of division information of Figure 17(a) (e.g., pan, zoom, etc.).

Since Figure 17 does not in the first instance disclose hierarchical upper and lower layers, Appellant submits that Figure 17 therefore can not possibly disclose or suggest adding division positions to division information of a lower layer of such a hierarchy, based on division information of an upper layer thereof.

Page 9 of Office Action also apparently relies on Official Notice for the feature of adding division positions to division information of a lower layer, based on division information of an upper layer. To reiterate, the documentary evidence provided by the

Office Action for such Official Notice is simply Appellant's Figure 17, which, as discussed above, (i) concededly does not disclose such feature, (ii) is not necessarily prior art, and (iii) can not possibly show hierarchization of a plurality of division information, as all of the division information are on the same level.

Matsushita '322 has been reviewed and is not seen to remedy the deficiencies of Matsushita '488 and AAPA. Moreover, the Office Action did not rely on Matsushita '322 for this feature.

Thus, the applied art fails to disclose or suggest adding division positions to division information of a lower layer, based on division information of an upper layer. Therefore, the rejection of Claims 12 and 21 should be reversed for this reason as well.

IV. **THE REJECTION OF CLAIMS 12 AND 21 SHOULD BE REVERSED BECAUSE CLAIMS 12 AND 21 WOULD NOT HAVE BEEN OBVIOUS OVER MATSUSHITA '488 IN VIEW OF AAPA SINCE THE OFFICE ACTION PROVIDES INADEQUATE RATIONALE TO COMBINE MATSUSHITA '488 AND THE AAPA.**

Notwithstanding that Matsushita '488 and AAPA fail to disclose at least two claimed limitations of Claims 12 and 21, Appellant additionally submits that the Office Action has provided insufficient rationale to combine Matsushita '488 and AAPA.

Initially, Appellants reiterate that Figure 17 is not conceded as prior art. Nevertheless, even accepting Figure 17 as part of AAPA solely for the purpose of argument, Appellant additionally submits that the Office Action has provided insufficient rationale to combine Matsushita '488 and AAPA.

In *KSR*, the U.S. Supreme court made clear a requirement to make explicit findings that support an articulated rationale to combine known elements so as to meet the terms of the claim:

> "Often, it will be necessary for a Court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine if there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. *To facilitate review, this analysis should be made explicit.*" See In re Kahn, 441 F.3d, 977, 988 (CAFED, 2006). (*"Rejections on obviousness grounds cannot be sustained by mere conclusory statements*; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness"). *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 412 (2007) (emphasis added).

Here, the Office Action simply asserts that one of ordinary skill in the art at the time of the invention would combine Matsushita '488 and AAPA "for providing more efficient image processing":

> "Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of AAPA with Matsushita for providing more efficient image processing." Office Action, page 9.

This conclusory statement is seen by Appellant as insufficient to satisfy an explicit analysis of why those skilled in the art would have considered it obvious to combine Matsushita '488 and AAPA.

In particular, the Office Action provides no rationale or guidance as to how such efficiency might be obtained. There is no rationale, supported by art-based evidence, that Matsushita '488 is somehow <u>in</u>efficient. There is no rationale, supported by art-based evidence, that those of ordinary skill would have perceived the precise nature of inefficiencies in Matsushita '488. There is no rationale, supported by art-based evidence, that those of ordinary skill would have known of techniques to address these unspecified inefficiencies. And, there is no rationale, supported by art-based evidence, that those of ordinary skill would have known of the specific techniques to address these unspecified inefficiencies in such a way as to result in the arrangement claimed herein.

Moreover, given the incompatibility between Matsushita '488 and AAPA, one of ordinary skill in the art would not be motivated to combine these references. Specifically, Matsushita '488 teaches hierarchization of data, whereas Appellant's Figure 17 teaches creating divisions in a moving image without hierarchization. There is no suggestion in Matsushita '488 that removing hierarchization would somehow be beneficial or helpful. Thus, Appellant respectfully submits that an ordinarily skilled artisan would not be motivated to combine Matsushita '488 and the AAPA, as the teachings of the AAPA contradict and in fact teach away from the teachings of Matsushita '488. This incompatibility is evidence that those of ordinary skill would believe that the proposed

combination of Matsushita '488 and AAPA is not sensible, and would not lead to the claimed arrangement.

Furthermore, the Office's rationale of "more efficient processing" proves too much. If the Office Action's rationale to "provide more efficient image processing" were adequate, then every invention in the field would be obvious, as any invention will always yield *some* improvement in efficiency. Put another way, since any invention yields some efficiency in one way or another, a simple rationale of "to provide more efficient image processing" essentially ignores the *KSR* requirement for explicit analysis.

In Appellant's view, the Office's rationale "to provide more efficient image processing" is precisely the sort of conclusory statement which *KSR* intended to avoid. If such a rationale is enough, then *KSR*'s requirement for a rationale would effectively be eviscerated.

In view of the above, it is respectfully submitted that the Office Action's proposed combination of Matsushita '488 and AAPA is not supported by adequate rationale, such that the rejection under § 103(a) should be reversed for this reason as well.

V. THE REJECTION OF CLAIM 13 SHOULD BE REVERSED BECAUSE CLAIM 13 WOULD NOT HAVE BEEN OBVIOUS OVER MATSUSHITA '488, AAPA AND OFFICIAL NOTICE SINCE THE COMBINATION OF THESE REFERENCES FAILS TO DISCLOSE OR SUGGEST KEY FEATURES OF CLAIM 13.

Since independent Claim 12 is believed to be allowable for the reasons above, it logically follows that Claim 13, which is dependent therefrom, should be allowable for at

least the same reasons. In view of these reasons, Appellant respectfully submits that the applied art fails to disclose or suggest the even further features defined in Claim 13.

As claimed, dependent Claim 13 is directed to the method according to Claim 12, and further comprises a setting step of setting the hierarchical order of the plurality of pieces of division information on the basis of division counts of division information. See Figures 28A and 30 and Specification, page 85, line 4 to page 89, line 16. By virtue of this arrangement, it is ordinarily possible to allow for easier browsing by a user, since the user can start with a level with few divisions, and then narrow down to specific characteristics based on more divisions.

In the rejection of Claim 13, pages 9 and 10 of the Office Action again point to Appellant's Figure 17.

However, as discussed above, Appellant's Figure 17 does not disclose hierarchical upper and lower layers at all. Moreover, there is simply no suggestion to count a number of divisions for each type of division information, much less to use such a count to set a hierarchical order of the plurality of pieces of division information, as claimed.

Appellant respectfully submits that any proposed combination of Matsushita '488 and AAPA therefore can not possibly disclose or suggest setting a hierarchical order of the plurality of pieces of division information on the basis of division counts of division information.

Matsushita '322 has been reviewed and is not seen to remedy the deficiencies of Matsushita '488 and AAPA. Moreover, the Office Action did not rely on Matsushita '322 for this feature.

Thus, the applied art fails to disclose or suggest setting a hierarchical order of the plurality of pieces of division information on the basis of division counts of division information. Therefore, the rejection of Claim 13 should be reversed for this reason as well.

CONCLUSION

Appellant respectfully submits that the 35 U.S.C. § 103(a) rejections of record are deficient for at least the foregoing reasons. Reversal of the rejections is respectfully requested.

Appellant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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CLAIMS APPENDIX

1. to 11. (Canceled)

12. (Previously Presented) A moving image processing method for dividing a moving image sensed between a beginning of recording and an ending of recording, on the basis of a plurality of items of additional data which indicate states upon sensing the moving image, wherein the additional data is added to the moving image and is able to be read out for each item from the moving image, comprising:

a generation step of defining an item group formed of one or a plurality of items selected from the plurality of items, and generating division information corresponding to the item group on the basis of the additional data of the items which belong to the item group;

a hierarchization step of hierarchizing a plurality of division information generated for each item group, and of adding division positions based on division information of an upper layer to division positions of division information of a lower layer, wherein the plurality of division information is hierarchized and the division positions are added in a case that the plurality of division information is generated in the generation step in correspondence with a plurality of item groups; and

a holding step of holding the division information obtained in the hierarchization step in correspondence with the moving image data in a memory.

13. (Previously Presented) The method according to claim 12, further comprising a setting step of setting the hierarchical order of the plurality of pieces of division information on the basis of division counts of the division information.

14. (Previously Presented) The method according to claim 13, wherein the setting step includes a step of setting division information with a smaller division count to have a higher hierarchical order.

15. (Previously Presented) The method according to claim 12, wherein the hierarchical order of the plurality of pieces of division information is set according to a hierarchical order which is set in advance for respective item groups.

16. (Previously Presented) The method according to claim 12, further comprising a designation step of designating the hierarchical order of the plurality of pieces of division information.

17. (Previously Presented) The method according to claim 12, further comprising:

a representative image generation step of generating and holding representative images which represent respective intervals of a moving image that are specified by division information of respective layers obtained in the hierarchization step; and

a display step of displaying, when one interval of one layer is designated, representative images of intervals included in the designated interval in a layer lower than the one layer.

18. (Previously Presented) The method according to claim 17, further comprising an execution step of executing a predetermined process for an interval of a moving image, which corresponds to a representative image selected from the representative images displayed in the display step.

19. (Previously Presented) The method according to claim 12, further comprising a storage step of storing the division information obtained in the hierarchization step in a storage medium in correspondence with the moving image data.

20. (Original) The method according to claim 12, wherein the item group includes one of an environment upon sensing an image, a sensed subject, a subject size upon sensing an image, and an effect applied to a moving image.

21. (Previously Presented) A moving image processing apparatus for dividing a moving image sensed between a beginning of recording and an ending of recording, on the basis of a plurality of items of additional data which indicate states upon sensing the moving image, wherein the additional data is added to the moving image and is able to be read out for each item from the moving image, comprising:

a generation unit constructed to define an item group formed of one or a plurality of items selected from the plurality of items, and generating division information corresponding to the item group on the basis of the additional data of the items which belong to the item group;

a hierarchization unit constructed to hierarchize a plurality of division information generated for each item group, and constructed to add division positions based on division information of an upper layer to division positions of division information of a lower layer, wherein the plurality of division information is hierarchized and the division positions are added in a case that the plurality of division information is generated by the generation unit in correspondence with a plurality of item groups; and

a holding unit constructed to hold the division information obtained by said hierarchization unit in correspondence with the moving image data.

22. (Original) A computer readable recording medium recording a control program which makes a computer execute a moving image processing method of claim 12.

23. (Previously Presented) A computer-executable control program stored on a computer-readable medium, for making a computer execute the moving image processing method of claim 12.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.